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			2633	

DATE MAILED: 06/30/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/904,289

Applicant(s)

PARKER, STEVEN E.

Examiner

M. R. Sedighian

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 25 March 2005.
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-27 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-27 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 25 March 2005 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____

1. This communication is responsive to applicant's 3/25/05 amendments and remarks. The amendments have been entered. Claims 1-27 are now pending.

2. The drawings are objected to under 37 CFR 1.83(a). The drawings must show every feature of the invention specified in the claims. Therefore, "a second plurality of connection devices that are coupled to a second fiber optic ring; a second central hub that is coupled to the second fiber optic ring; the second central hub that is coupled to the first central hub; a plurality of additional fiber optic rings; a plurality of signal sources; a plurality of additional connection devices that are coupled to one of the additional fiber optic rings; a plurality of additional central hubs that are coupled to the additional fiber optic rings; additional central hub that is coupled to at least one central hub; first and second central hubs that each comprises of dual counter-rotating fiber optic rings; first and second fiber optic rings that each comprises of a plurality of subloops equal in number to at least the plurality of first or second connection devices; first and second central hubs that each comprises of a plurality of ports individually coupled to a subloop of the first or second fiber optic ring" must be shown or the feature(s) canceled from the claim(s). No new matter should be entered.

Corrected drawing sheets in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. Any amended replacement drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. The figure or figure number of an amended drawing should not be labeled as "amended." If a drawing figure is to be canceled, the appropriate figure must be removed from the replacement sheet, and where necessary, the remaining figures must

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be renumbered and appropriate changes made to the brief description of the several views of the drawings for consistency. Additional replacement sheets may be necessary to show the renumbering of the remaining figures. Each drawing sheet submitted after the filing date of an application must be labeled in the top margin as either "Replacement Sheet" or "New Sheet" pursuant to 37 CFR 1.121(d). If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

3. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

4. Claims 1 and 3 are rejected under 35 U.S.C. 102(b) as being anticipated by Lindsey et al. (US Patent No: 6,226,296).

Regarding claim 1, Lindsey teaches a method of communicating comprising (col. 13, lines 32-40 and fig. 10): providing at least one interconnect hub (1100, figs. 10, 11); connecting the at least one interconnect hub (1100, figs. 10, 11) to a plurality of audio connection devices (1111, fig. 11 and col. 14, lines 29-32) to form a ring network (1150, fig. 10) of audio connection devices (note that there are audio connection devices such as 1111 in each of the nodes 1100, 1200, 1300 of the ring network 1400) with the interconnect hub at the center of the ring network

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(col. 14, lines 33-40, for example node 1100 can be considered as an interconnect hub that is placed at the center of ring network 1400), wherein the audio connection devices (col. 14, lines 29, 35) connect to each other through the at least one interconnect hub (for example node 1100, fig. 10); and synchronously (1124, fig. 11 and col. 15, lines 3-8) transmitting data between at least two of the audio connection devices through the at least one interconnect hub (col. 14, lines 33-40).

Regarding claim 3, Lindsey teaches the interconnect hub comprises at least one second ring connecting the audio communication devices (the second ring 1500 that connects the nodes 1100, 1300,, and 1200 in fig. 10).

5. Claim 1 is rejected under 35 U.S.C. 102(e) as being anticipated by Edens et al. (US Patent No: 6,611,537).

Regarding claim 1, Edens teaches a method of communicating comprising (col. 24, lines 48-56 and 700, fig. 7): providing at least one interconnect hub (702, fig. 7); connecting the at least one interconnect hub (702, fig. 7) to a plurality of audio connection devices (col. 24, lines 67) to form a ring network of audio connection devices (col. 24, lines 57-59) with the interconnect hub at the center of the ring network (col. 30, lines 58-65, col. 31, lines 53-65), wherein the audio connection devices connect to each other through the at least one interconnect hub (col. 110, lines 43-67); and synchronously transmitting data between at least two of the audio connection devices through the at least one interconnect hub (col. 24, lines 57-67).

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6. Claim 7-12 are rejected under 35 U.S.C. 102(b) as being anticipated by Korowitz et al. (US Patent No: 4,482,980).

Regarding claim 7, Korowitz teaches a digital fiber optic switching and distribution system (fig. 1), comprising: a fiber optic concentrated ring (28, 30, fig. 1) configured as a communication ring to a plurality of signal sources (16, 17, 18, 19, fig. 1), a plurality of connection devices (10, 11, fig. 1) coupled (20, 22, fig. 1) to the ring (28, 30, fig. 1), each receiving analog signals from at least one signal source (50, fig. 3) and converting the analog signals into digital data signals (col. 7, lines 15-41 and 48, fig. 3); and a central hub (14, fig. 1) coupled to the ring and receiving the digital data signals for routing to the connection devices (col. 2, lines 63-68, col. 3, lines 1-14).

Regarding claim 8, Korowitz further teaches the central hub (14, fig. 1) comprises dual counter rotating fiber optic ring (28, 30, fig. 1) for single point failure protection (col. 2, lines 43-62).

Regarding claim 9, Korowitz further teaches a plurality of subloops equal in number to at least the plurality of connection devices, wherein each subloop couples to at least one the connection devices (note that connection devices 10 or 11 are connected to electrical cables 20 and 22 that are comprised of a plurality of cable lines, or subloops 33, 35, and 38 that are shown in fig. 2).

Regarding claim 10, Korowitz further teaches the central hub (14, fig. 1) comprises a plurality of ports individually coupled to a subloop of the fiber optic ring (it is obvious that the central hub 14 has a plurality of ports in order to be connected to interface HCI and to the lines 21 and 23 for further connection to the ring network).

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Regarding claims 11-12, Korowitz further teaches the system further comprising a plurality of control panels individually coupled to one of the plurality of connection devices (col. 2, lines 35-42 and 52, 60, fig. 3).

7. Claim 4-5 and 13-18 are rejected under 35 U.S.C. 102(b) as being anticipated by Robillard et al. (US patent No: 5,706,278).

Regarding claim 4, Robillard teaches a communication system comprising: a star network (10, fig. 1 and col. 4, lines 40-47) having a hub located at the center of the star network (12, fig. 1), the star network carrying a synchronous data stream (col. 8, lines 41-61); and a plurality of connection devices (20, 26₁₂, 28₁₂, fig. 1) coupled (21, fig. 1) to the hub, each connection device receiving analog signals from at least one signal source (ANALOG SENSOR ACTUATOR, fig. 1) and converting (A/D CONVERTER MUX, fig. 1) the received analog signal into digital data signals (col. 4, lines 54-66).

Regarding claim 5, Robillard teaches the hub (12, fig. 1) comprises a ring (21, fig. 1) connecting a plurality of network connections (26₁₂, 28₁₂, and 26₂, 28₂ in fig. 1).

Regarding claim 13, Robillard teaches a digital fiber optic switching and distribution system (fig. 1), comprising: a fiber optic concentrated ring (10, fig. 1) configured as a communication network to a plurality of signal sources (ANALOG SENSOR ACTUATOR, fig. 1); a plurality of connection devices (18, 20, fig. 1) coupled to the fiber optic concentrated ring (10, fig. 1), each connection device (20, fig. 1) receiving analog signals (analog signal from the analog sensor actuator source) from at least one signal source (ANALOG SENSOR ACTUATOR, fig. 1) and converting the received analog signals into digital data signals (A/D CONVERTER MUX, fig.

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1), each connection device (20, fig. 1) comprises a digital signal processor (DCCP, fig. 1) for selective mixing of the signals received from the at least one signal source (col. 4, lines 54-67, col. 5, line 1); and a central hub (12, fig. 1 and col. 5, line 14) coupled to the fiber ring (21, 22, 23, fig. 1) and receiving the digital signals for routing to the connection devices (col. 4, lines 50-56); and wherein the central hub comprising a bus synchronizer for synchronizing the routing of data signals through the fiber optic concentrated ring (col. 8, lines 41-61).

Regarding claim 14, Robillard further teaches the central hub further comprises dual counter rotating fiber optic rings (21, 22, 23, fig. 1) for single point failure protection (col. 6, lines 11-18).

Regarding claim 15, Robillard further teaches the ring comprises a plurality of subloops equal in number to the plurality of connection devices (note that for each connection device, such as connection devices 16, 18, 20, there are a plurality of loops, or subloops such as loops 21 or 22 or 23).

Regarding claim 16, Robillard teaches the central hub (12, fig. 1) comprises a plurality of ports individually coupled to a subloop of the fiber optic ring (it is obvious that the central hub 12 has a plurality of ports in order to be connected to the fiber ring 21 and for connection to the transceiver 26₁).

Regarding claims 17-18, Robillard further teaches a plurality of control panels (col. 4, lines 65-66 and DCCP 28₁₀₋₁₂, fig. 1) individually coupled to one of the plurality connection devices (20, fig. 1).

8. Claim 19 is rejected under 35 U.S.C. 102(e) as being anticipated by Rabenko et al. (US Patent No: 6,834,057).

Regarding claim 19, Rabenko teaches a digital fiber optic switching and distribution system (col. 3, lines 53-59 and fig. 1), comprising: a first fiber optic concentrated ring (col. 4, lines 10-14 and 1020, fig. 1) configured as a communication network to a plurality of signals sources (1047a, 1047b, figs. 2, 20, note that a plurality of telephones 1047a, 1047b within homes 1014 communicate with hubs and headend, as shown in figs. 1, 2, 20); a first plurality of connection devices (for example connection devices such subsystem 1049 of figs. 2, 20) coupled to the first ring and each receiving analog signals from at least one signal source and converting (2014, fig. 20) the received analog signals into digital data signals (col. 20, lines 31-37); a first central hub (1022, fig. 1) coupled to the first fiber ring (1020, fig. 1) and receiving the digital data signals for routing to the plurality of connection devices (col. 3, lines 53-56, col. 4, lines 21-35, digital data signals are transmitted from hub 1022 to a plurality of homes 1014 and to respective subsystems 1049 and devices 1047 in each home); a second fiber optic concentrated ring (col. 4, lines 10-12 and 1026, fig. 1) configured as a communication network to a plurality of signal sources (for example, telephones 1047a, 1047b within homes 1014 that communicate with the second hub 1024, shown in figs. 1, 2); a second plurality of connection devices coupled to the second fiber ring (the subsystems 1049 within homes 1014 that communicate with the second hub 1024, figs. 2, 20) for receiving analog signals from at least one signal source and converting the received analog signals into digital data signals (col. 20, lines 30-37); and a second central hub (1024, fig. 1) coupled to the second fiber ring and receiving data signals for routing to the second plurality of connection devices (digital data signals are transmitted from

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hub 1024 to a plurality of homes 1014 and to respective subsystems 1049 and devices 1047 in each home communicating with the second hub 1024), wherein the second central hub is coupled (1026, fig. 1) to the first central hub as a signal fiber optic switching and distribution system (col. 4, lines 10-11).

9. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

10. Claim 2 is rejected under 35 U.S.C. 103(a) as being unpatentable over Lindsey et al. (US Patent No: 6,226,296) in view of Arimilli (US Patent No: 5,757,801).

Regarding claim 2, Lindsey differs from the claimed invention in that Lindsey does not specifically teach transmitting a frame of data at a rate of 8 KHz. Arimilli teaches data can be transmitted at a rate of 8 KHz (col. 12, lines 15-20). It would have been obvious to a person of ordinary skill in the art at the time of invention to incorporate a data transmission rate of 8 KHz, as it is taught by Arimilli, for the data transmission in the communication system of Lindsey to transmit high quality data.

11. Claim 2 is rejected under 35 U.S.C. 103(a) as being unpatentable over Edens et al. (US Patent No: 6,611,537) in view of Arimilli (US Patent No: 5,757,801).

Regarding claim 2, Edens differs from the claimed invention in that Edens does not specifically teach transmitting a frame of data at a rate of 8 KHz. Arimilli teaches data can be

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transmitted at a rate of 8 KHz (col. 12, lines 15-20). It would have been obvious to a person of ordinary skill in the art at the time of invention to incorporate a data transmission rate of 8 KHz, as it is taught by Arimilli, for the data transmission in the communication system of Edens to transmit high quality data.

12. Claim 6 is rejected under 35 U.S.C. 103(a) as being unpatentable over Robillard et al. (US patent No: 5,706,278) in view of Arimilli (US Patent No: 5,757,801).

Regarding claim 6, Robillard differs from the claimed invention in that Robillard does specifically teach transmitting a frame of data at a rate of 8 KHz. Arimilli teaches the transmission of data at a rate of 8 KHz (col. 12, lines 15-20). It would have been obvious to a person of ordinary skill in the art at the time of invention to incorporate a data transmission rate of 8 KHz, as it is taught by Arimilli, for the data transmission in the communication system of Robillard to transmit high quality data.

13. Claim 19 and 21-27 are rejected under 35 U.S.C. 103(a) as being unpatentable over Farleigh et al. (US patent No: 5,206,857) in view of Baran (US Patent No: 5,550,820).

Regarding claim 19, Farleigh teaches a digital fiber optic switching and distribution system (col. 3, lines 34-52, fig. 1), comprising: a first fiber optic concentrated ring (10, fig. 1) configured as a communication network to a plurality of signals sources (101, 102, fig. 1); a first plurality of connection devices (100, fig. 1 and 100, 103, 104, fig. 2) coupled to the first ring (10, fig. 1) and each receiving signals from at least one signal source (connection devices 104 and 103 receive signals from signal sources 101 and 102); a first central hub (col. 3, lines 45-46 and

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200, figs. 1, 2) coupled to the first fiber ring (10, fig. 1) and receiving data signals for routing to the plurality of connection devices (hub 200 receives data signals from fiber rings 10 and 20 and routes the data signals to connection devices of unit 100); a second fiber optic concentrated ring (20, fig. 1) configured as a communication network to a plurality of signal sources (121, 122, fig. 1); a second plurality of connection devices (connection devices in PBX 120, fig. 1) coupled to the second fiber ring (20, fig. 1) for receiving signals from at least one signal source (PBX 120 receives signals from sources 121 and 122, fig. 1) and a second central hub (300, fig. 1) coupled to the second fiber ring and receiving data signals for routing to the second plurality of connection devices (second hub 300 receives data signals from fiber rings 10 and 20 and routes the data signals to connection devices of unit PBX 120), wherein the second central hub is coupled to the first central hub as a signal fiber optic switching and distribution system (the first central hub 200 is coupled to the second central hub 300 by through fibers 10 and 20). Farleigh differs from the claimed invention in that Farleigh does not specifically disclose the connection devices receive analog signals from signal sources and converting the received analog signals into digital data signals. However, Farleigh discloses digital voice communication equipment at telephone offices typically use 8 KHz as the sampling frequency when carrying out analog-to-digital conversion (col. 7, lines 28-30). Baran teaches a telephone interface unit (62, fig. 3a) that includes an A/D converter (86, fig. 3a). Accordingly, it would have been obvious that voice signals that are received from signal sources (such as telephones 102, 121, 122) can be analog-to-digital converted by incorporating A/D converter interfaces in the connection devices or at an interface to connection devices, as it is taught by Baran, in order to provide digital data communication that can be further transmitted.

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Regarding claim 21, Farleigh teaches the first and second central hubs each comprises dual counter-rotating fiber optic ring (fiber rings 10 and 20 are counter-rotating rings, fig. 1) for a single point failure protection (col. 3, lines 20-26).

Regarding claim 22, Farleigh teaches a first plurality of control panels individually coupled to one of the first plurality of connection devices, and a second plurality of control panels individually coupled to one of the second plurality of connection devices (for example, control units 210 and 240 are connected to processor 103 and clock recovery circuit 600 through lines 60 and 70).

Regarding claim 23, Farleigh teaches each of the first and second plurality of control panels has access to each of the first and second plurality of connection devices (each of the control panels 210 and 240 has access to node processor 103 and clock recovery circuit 600, respectively).

Regarding claim 24, Farleigh teaches each of the first and second fiber optic concentrated rings comprises a plurality of subloops equal in number to at least the plurality of first or second connection devices, respectively (for example, the respective subloops 30 and 40 that are connected to ring fibers 10 and 20).

Regarding claim 25, Farleigh teaches the first and second central hubs each comprises a plurality of ports individually coupled to a subloop of the first or second fiber optic concentrated ring respectively (the network interfaces 200 and 300, or the first and second central hub, each has ports that are individually coupled to rings 10 and 20 that are further coupled to a subloop 30).

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Regarding claim 26, Farleigh teaches each of the first and second plurality of connection devices comprises a digital signal processor (103, fig. 2) for selective mixing of signals received from the at least one signal source (col. 5, lines 23-39).

Regarding claim 27, Farleigh teaches the first and second central hubs each further comprises a bus synchronizer (104, fig. 2) for synchronizing the routing of data frame through the respective first or second ring (col. 5, lines 34-44).

14. Claim 20 is rejected under 35 U.S.C. 103(a) as being unpatentable over Rabenko et al. (US Patent No: 6,834,057).

Regarding claim 20, Rabenko teaches a digital fiber optic switching and distribution system as discussed above in claim 19. Rabenko differs from the claimed invention in that Rabenko does not specifically disclose a plurality of additional fiber optic concentrated rings as a communication network to a plurality of signal sources; a plurality of additional connection devices that are coupled to additional fiber rings for receiving analog signals from signal sources and converting the analog signals to digital data signals, and a plurality of central hubs that are individually coupled to one of the additional fiber rings for receiving digital data signals and routing the signals to the connection devices. Rabenko teaches an optical fiber ring network that is typically capable of facilitating communication between approximately 100,000 homes 1014 and a headend 1012 (col. 4, lines 12-14). Rabenko further teaches hubs 1022 and 1024 that are in communication with the headend 1012, and wherein each hub is capable of facilitating communication with approximately 20,000 homes 1014 (col. 4, lines 5-9). Rabenko further teaches additional one or more optional transmit contention regions (not shown) may be

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provided (col. 6, lines 6-8). Accordingly, it would have been obvious to a person of ordinary skill in the art at the time of invention that an optical data communication system such as the one of Rabenko can be expanded to facilitate data communication between additional homes 1014, for example, by incorporating additional rings and additional hubs, such as the ones disclosed and shown in fig. 1, to further transmit digital data signals to an extended number of homes 1014 having additional connection devices and signal sources.

15. Applicant's arguments with respect to claims 1-6 have been considered but are moot in view of the new ground(s) of rejection.

Applicant's arguments filed 3/25/05 with respect to claims 7-18 have been fully considered but they are not persuasive.

Remark states Korowitz does not disclose computer station 14 routes digital data signals to connection devices. Korowitz discloses computer station 14 is connected to the global highway by a pair of local data network cables 21 and 23 (col. 2, lines 63-65). Korowitz further discloses host computer generates set point updates for the control loops and transmit those values over the data high way to the appropriate control station (col. 3, lines 9-20). Korowitz further discloses host computer can be employed for directing digital control on those control loops where conventional PID control is unsuitable (col. 3, lines 24-26), and such control signals are sent over the data highways to appropriate controller (col. 3, lines 30-32). Accordingly, if it is not inherent, it would have been obvious that computer station 14 can route digital data signals to connection devices, as discussed above in claim 7. Remark further states Robillard does not disclose node 12 (or the central hub) routes the digital data signals to connection devices.

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However, Robillard teaches a node 12 that is bi-directionally connected to a connection device 20 through fiber line 21 for transmission of messages (col. 4, lines 44-47, 54-58). It is obvious that node 12 communicates or routes the digital data signals to connection devices such as transceiver 26₁₂ and DCCP 28₁₂ of connection device 20, as discussed above in claim 13.

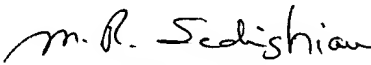
Applicant's attention is directed that during the prosecution of a pending patent application the terms found in the claims should be given the broadest reasonable interpretation, *See in re Pearson*, 181 USPQ 641 (CCPA 1974).

16. Any inquiry concerning this communication or earlier communications from the examiner should be directed to M. R. Sedighian whose telephone number is (571) 272-3034.

The examiner can normally be reached on M-F (from 9 AM to 5 PM).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Jason Chan can be reached on (571) 272-3022. The fax phone number for the organization where this application or proceeding is assigned is (571) 273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).


M. R. SEDIGHIAN
PRIMARY EXAMINER

MRS
6/16/05

